

IN THE CLAIMS:

Cancel claims 6 and 14 – 17.

Amend claims 1 and 7 as set forth below:

1. (currently amended) A system for precisely controlling an amount of flatness or curvature of a lapping plate, the system comprising:
 - a rotatable platform;
 - a lapping plate mounted to the rotatable platform for rotation therewith;
 - a holder having a workpiece located between the holder and the lapping plate;
 - an abrasive slurry located between the lapping plate and the workpiece; [[and]]
 - means for controlling a temperature of the lapping plate and thereby precisely manipulating an amount of flatness or curvature of the lapping plate[[.]]; and wherein the temperature of the lapping plate is adjusted during a charge process to selectively charge different areas of the lapping plate in a dictated order.
2. (unchanged) The system of claim 1, wherein a bimetallic effect is exploited to induce a linear expansion in the lapping plate so that the flatness or curvature of the lapping plate is manipulated with thermal cycling.
3. (unchanged) The system of claim 1, wherein the workpiece is a magnetic slider.
4. (unchanged) The system of claim 1, wherein the lapping plate can be configured in a flat, concave, or convex shape.
5. (unchanged) The system of claim 1, wherein the lapping plate gives the workpiece a high crown-to-camber ratio.
6. (canceled)
7. (currently amended) The system of claim [[6]] 1, wherein a middle diameter portion of the lapping plate is charged first, and then an inner diameter portion of the lapping plate and/or an outer diameter portion of the lapping plate.

8. (unchanged) The system of claim 1, wherein a temperature of the workpiece and the abrasive slurry are controlled along with the temperature of the lapping plate.
9. (unchanged) The system of claim 1, wherein the lapping plate is formed from a plurality of layers of materials having different coefficients of linear expansion.
10. (unchanged) The system of claim 9, wherein the layers are formed from metal alloys.
11. (unchanged) The system of claim 10, wherein the layers comprise a tin-antimony alloy adjacent to the workpiece, and a steel alloy base.
12. (unchanged) The system of claim 1, wherein the lapping plate comprises a material with a linear expansion coefficient of $23 \times 10^{-6}/^{\circ}\text{C}$ bonded to another material with a linear expansion coefficient of $10 \times 10^{-6}/^{\circ}\text{C}$.
13. (unchanged) The system of claim 1, wherein the lapping plate gives the workpiece a negative crown and positive camber values.
14. (canceled)
15. (canceled)
16. (canceled)
17. (canceled)

Add the following new claims:

18. (new) The system of claim 1, wherein the means for controlling temperature comprises a temperature regulating unit that circulates fluid that travels between a thermal bath and a chuck holding the lapping plate.

19. (new) The system of claim 1, wherein an interior air temperature of a facing tool is also regulated during facing of the lapping plate.

20. (new) A system for precisely controlling an amount of flatness or curvature of a lapping plate, the system comprising:

- a rotatable platform;

- a lapping plate mounted to the rotatable platform for rotation therewith, the lapping plate being formed from a plurality of layers of metal alloy materials having different coefficients of linear expansion;

- a holder having a magnetic slider located between the holder and the lapping plate;

- an abrasive slurry located between the lapping plate and the magnetic slider;

- means for controlling a temperature of the lapping plate, the magnetic slider, and the abrasive slurry, the means comprising a temperature regulating unit that circulates fluid that travels between a thermal bath and a chuck holding the lapping plate, and thereby precisely manipulating an amount of flatness or curvature of the lapping plate, such that a bimetallic effect is exploited to induce a linear expansion in the lapping plate so that the flatness or curvature of the lapping plate is manipulated with thermal cycling; wherein

- the temperature of the lapping plate is adjusted during a charge process to selectively charge different areas of the lapping plate in a dictated order, and give the magnetic slider a high crown-to-camber ratio; and wherein

- a middle diameter portion of the lapping plate is charged first, and then an inner diameter portion of the lapping plate and an outer diameter portion of the lapping plate.

21. (new) The system of claim 20, wherein the lapping plate can be configured in a flat, concave, or convex shape.

22. (new) The system of claim 20, wherein the layers comprise a tin-antimony alloy adjacent to the magnetic slider, and a steel alloy base.

23. (new) The system of claim 20, wherein the lapping plate comprises a material with a linear expansion coefficient of $23 \times 10^{-6}/^{\circ}\text{C}$ bonded to another material with a linear expansion coefficient of $10 \times 10^{-6}/^{\circ}\text{C}$.

24. (new) The system of claim 20, wherein an interior air temperature of a facing tool is also regulated during facing of the lapping plate.